

**California Environmental Protection Agency
AIR RESOURCES BOARD
December 7, 1999**

**Summary of Revisions to the October 22, 1999 Proposed Phase 3 California Gasoline Regulations
And Other Actions that ARB Staff Intends to Propose at the December 9, 1999 Hearing**

1. Reduce the Phase 3 California Gasoline (CaRFG3) cap limits for T50 and T90 to 220°F and 330°F respectively, making them identical to the current cap limits for these properties. Because of this change the proposed specification for Driveability Index (DI) is no longer needed to maintain existing fuel performance. Therefore, the proposal to establish a DI specification is being withdrawn.
2. Revise the proposed CaRFG3 T50 flat limit specification from 211°F to 213°F, and the CaRFG3 T50 averaging specification from 201°F to 203°F. Based upon improved data on the average in-use fuel in 1998 this revision can be made while still preserving the full benefits of the current program. This change provides additional flexibility to refiners and allows greater production of gasoline in California refineries. The improved data on 1998 in-use fuel became available after the preparation of the staff report. (See attachment for revised proposal)
3. Allow refiners and importers to supply gasoline meeting the CaRFG3 standards, including the prohibition of MTBE use and the CaRFG3 Predictive Model, prior to December 31, 2002. This change will enable refiners to take advantage of the CaRFG3 rules to phase out MTBE use early.
4. Propose alternative CaRFG3 standards for small refiners that have produced CaRFG2 during 1998 and 1999. A small refiner would need to meet all CaRFG3 requirements with the following adjusted flat limits: aromatics at 35 v%, benzene at 1.0 v%, T50 at 220°F, and T90 at 312°F. Further, such refiners must also comply with applicable federal RFG standards. The increased emissions associated with these alternative specifications must be fully mitigated through a mechanism to be added to the small refiner diesel regulations, and a volume cap would also apply.
5. Delete the proposed specifications for denatured ethanol and propose to establish specifications for denatured ethanol in concert with CARBOB amendments, which will be considered next fall. Retain preexisting provision on the representativeness of oxygenates used in CARBOB testing.
6. Suggest the Board direct the Executive Officer, as part of this rulemaking, to revise the exhaust, evaporative and CO weightings and the vehicle weightings in the CaRFG3 Predictive Model to reflect the EMFAC 2000 emissions inventory after EMFAC 2000 is approved by the Board.
7. Suggest the Board direct the staff to return to the Board for a hearing by October 2000 on further amendments to the CARBOB provisions, proposed specifications for denatured ethanol, and amendments to the diesel regulations to implement the mitigation required of small refiners.
8. Propose a reanalysis of the impact of commingling by the end of 2001, and, if this assessment indicates that emissions will increase beyond the level mitigated by the CaRFG3 rule, commit staff to proposing revisions to the regulation to provide the needed additional reductions.

ATTACHMENT

ARB Staff's Suggested Modifications to the Proposed Phase 3 CaRFG Standards December 7, 1999

<i>Property</i>	<i>Flat Limits</i>		<i>Averaging Limits</i>		<i>Cap Limits</i>	
	<i>CaRFG Phase 2</i>	<i>CaRFG Phase 3</i>	<i>CaRFG Phase 2</i>	<i>CaRFG Phase 3</i>	<i>CaRFG Phase 2</i>	<i>CaRFG Phase 3</i>
Reid Vapor Pressure (pounds per square inch; warmer months only)	7.00	7.00 or 6.90 w/ evap PM	Not Available	Not Available	7.00	6.40 – 7.20
Sulfur Content (parts per million by weight)	40	20	30	15	80	60
						30 (12/31/04)
Benzene Content (percent by volume)	1.0	0.8	0.8	0.7	1.2	1.1
Aromatics Content (percent by volume)	25.0	25.0	22.0	22.0	30.0	35.0
Olefins Content (percent by volume)	6.0	6.0	4.0	4.0	10.0	10.0
T50 (degrees Fahrenheit)	210	211 <u>213</u>	200	201 <u>203</u>	220	225 <u>220</u>
T90 (degrees Fahrenheit)	300	305	290 (max. 310)	295	330	335 <u>330</u>
Oxygen Content (percent by weight)	1.8 - 2.2	1.8 - 2.2	Not Available	Not Available	1.8 - 3.5 winter areas	1.8 - 3.7 winter areas
					0 - 3.5	0 – 3.7
Driveability Index (DI)	None	1225	Not Available	Not Available	None	None